

New Species of *Ruellia* (Acanthaceae) from the Venezuelan Guayana

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ABSTRACT. Recent expeditions in the Venezuelan Guayana have resulted in additional new taxa in the genus *Ruellia* (Acanthaceae). The following places these novelties on record for the convenience of other taxonomists prior to the publication of the *Flora of the Venezuelan Guayana*. Five new Venezuelan species of *Ruellia*, *R. wurdackii*, *R. steyermarkii*, *R. delascioi*, *R. liesneri*, and *R. boliviensis*, are described, illustrated, and compared with their closest relatives.

Ruellia L. is the second largest genus of Acanthaceae, with approximately 250 species of perennial herbs and shrubs with a pantropical distribution. The genus, named for Jean de la Ruelle (1474–1537), a French physician and herbalist, exhibits large and usually showy flowers borne either singly or in various inflorescence forms, which are either

axillary or terminal or both. The funnelform or salverform corollas are either red, yellow, white, or purple (mauve) with a narrow tube and an often campanulate limb with five spreading lobes. The genus is characterized by the four didynamous stamens each with bilocular anthers, which are usually muticous at the base. The capsules are either oblong or clavate, with the dissepiment remaining attached to the capsule wall at maturity. Each capsule contains between 4 and 20 plano-compressed, suborbicular seeds. These are provided with a mucilaginous coat that exhibits, after moistening, tapered, short trichomes with walls marked internally by rings or spirals (Long, 1970). In an attempt to identify recent collections of *Ruellia* from the Venezuelan Guayana, I have found five undescribed species of the genus.

Key to the Venezuelan Guayana Species of *Ruellia*

- 1a. Inflorescence paniculate, flowers borne on simple or dichotomously branched peduncles or flowers in clusters of 2–4 at the leaf axil.
 - 2a. Flowers axillary, sessile, verticillate and clustered.
 - 3a. Corolla narrowly infundibular, 25 mm long, white with violet veins; leaves petiolate, the blades ovate-oblong *R. menthoides*
 - 3b. Corolla funnelform, 35–50 mm long, light pink to pale mauve or purple; leaves sessile to subsessile, the blades linear to narrowly lanceolate *R. geminiflora* var. *angustifolia*
 - 2b. Flowers terminal and axillary, pedicellate, pedunculate, the peduncles 25–100 mm long.
 - 4a. Flowers terminating conspicuously long peduncles, these 70–100 mm long.
 - 5a. Corolla tube white, the limb 15 mm broad, the lobes obovate, ca. 6 mm long and wide; peduncles slender, curved 1. *R. wurdackii*
 - 5b. Corolla tube scarlet or crimson, the limb 25–30 mm broad, the lobes oblong, 12 mm long, 5–6 mm wide; peduncles rather stout, erect-ascending *R. macrophylla*
 - 4b. Flowers not terminating on conspicuously long peduncles, these 25–60 mm long (if peduncle is more than 40 mm long then inflorescence is a terminal panicle 60–130 mm long).
 - 6a. Corolla yellow, greenish yellow, or pale green, the limb oblique.
 - 7a. Corolla pale green, 30–33 mm long, the lobes revolute-twisted with age; calyx segments narrowly ovate, 14–17 mm long, winged on the angles; leaf blades elliptic to oblong, 7–13 cm long and 3.5–5 cm wide 2. *R. steyermarkii*
 - 7b. Corolla pale yellow or greenish yellow, 35–60 mm long, the lobes spreading with age; calyx segments linear-lanceolate, 25–30 mm long, membranous; leaf blades ovate or oblong-ovate, 18–30 cm long and 8.5–12 cm wide.
 - 8a. Corolla pale yellow, 50–60 mm long, 20 mm wide near the mouth; stamens exserted, not reflexed; leaf blades oblong-ovate, 26–30 cm long, 10.5–12 cm wide, narrowed at the base *R. malaca*
 - 8b. Corolla greenish yellow, 35 mm long, 10 mm wide near the mouth; stamens exserted, reflexed; leaf blades ovate, 18–20 cm long, 8.5–9.3 cm wide, obtuse at the base 3. *R. delascioi*
 - 6b. Corolla mauve, the limb regular *R. tuberosa*
 - 1b. Inflorescence spicate or a 2–3-flowered terminal fascicle.

9a. Flowers borne in terminal, 2–3-flowered fascicles or terminal, few-flowered, congested spikes.

10a. Corolla scarlet or red, 45–50 mm long; petioles 5–12 mm long, pilose and puberulous 4. *R. liesneri*

10b. Corolla white, 60–80 mm long; petioles 3–5 mm long, puberulous *R. sprucei*

9b. Flowers borne opposite in pairs on lax, axillary and terminal spikes 5. *R. bolivarensis*

1. *Ruellia wirdackii* Wasshausen, sp. nov. TYPE:

Venezuela. Bolívar: Río Parguaza, at base of Piedra Mapollos, E bank of river about 10 km above El Carmen (about 60 river km from mouth), 110 m, 2 Jan. 1956, *J. J. Wurdack & J. V. Monachino* 41082 (holotype, US; isotype, NY). Figure 1E–G.

Suffrutex caulis quadrangularibus, angulis rotundatis. Folium lamina oblongo-elliptica vel ovata, graciliter acuminata, basi angustata in petiolum decurrenti, membranacea, supra atroviridi, subitus pallide viridi costa et venis prominentibus, utrinque glabra; petiolo glabro. Inflorescentiae ex cymis dichotomis constantes; pedunculis gracibus, glabris vel parce puberulis; bracteolis anguste oblongis glabris vel puberulis et parce glanduloso-pilosis; calycis segmentis inaequalibus, anguste linearibus, glanduloso-pilosis; corollae tubo albo, leviter curvato, limbo suberecto, purpureo, ad basim pallide luteo lobis obovatis, rotundatis; staminibus inclusis.

Shrub or suffrutescent herb; stems unbranched, 25–40 cm tall, quadrangular, 1–1.5 mm wide, the angles rounded. Leaves petiolate, petioles about 10 mm long, glabrous, narrowly winged, the blades oblong-elliptic to ovate, 8–11 cm long and 2.5–4 cm wide, long, slenderly acuminate at apex, attenuate, membranous, entire or shallowly crenate, rather thin, the upper surface dark green, glabrous, the lower surface paler green, glabrous, the costa and lateral veins (about 7 pairs) somewhat more conspicuous underneath, the cystoliths numerous and conspicuous under a lens. Flowers borne in lax dichotomously branched cymes, the peduncles slender, curved, subquadrangular, about 70 mm long, glabrous or sparingly and inconspicuously puberulous, the primary branches 1.5–2.5 cm long, puberulous, the trichomes erect, occasionally gland-tipped; bracteoles narrowly oblong, 3.5–4 mm long, 0.75 mm wide, glabrous to puberulous and sparingly glandular-pilose, the pedicels 2 mm long, subquadrangular, puberulous, the trichomes minute and erect; calyx segments unequal, narrowly linear, 11–14 mm long, 1 mm wide, glandular-pilose, the trichomes spreading, 0.5–2 mm long; corolla 46 mm long, the tube white, slightly curved, 32 mm long, 1.6 mm broad at base, narrowed to 1 mm at 1 mm above base, the throat turned up from the tube, 8 mm wide, the limb suberect, purple with darker spots on the lower portion, pale yellow at base, the lobes obovate, about 6 mm long and wide, rotundate; stamens included, about 8 mm long; pollen sph-

roidal, 92 μ m diam., the reticulum homobrochate, membrane granular (Fig. 3A, B). Capsule clavate, 1.2 cm, 2.5 mm wide and thick, narrowed at the base, the solid portion 4.5 mm long, apically obtuse, minutely and sparingly puberulous, upward the trichomes are intermixed with a few glands. Mature seeds wanting.

Distribution. Occasional in forests and under-story in Amazonian Venezuela and Brazil at elevations between 70 and 250 m.

Paratypes. VENEZUELA. TERRITORIO FEDERAL AMAZONAS: Depto. Atures, road Puente Cataniapo–Gavilán, 20–25 km SE of Puerto Ayacucho, 90 m, *P. J. M. Maas & O. Huber* 5094 (U, US); carretera vía a Gavilán puente de Paso del Diablo hasta 2 km más adelante, sur-este de Puerto Ayacucho, 5°30'N, 67°27'W, 70–80 m, *Francisco Guánchez* 274 (US). BRAZIL. PARÁ: Serra dos Carajás, 8.5 km W of AMZA camp N-1 on road to Río Itacaiúnas, 5°59'S, 50°20'W, 250 m, *C. R. Sperling, R. S. Secco, M. Condon, A. L. Mesquita, B. G. S. Ribeiro & L. R. Marinho* 5795 (NY).

Ruellia wirdackii is related to another Venezuelan species, *R. pterocaulon* Leonard. In *R. pterocaulon* the corolla is 25 mm long, the corolla tube is lavender, erect, 15 mm long, the leaf blades are firm and rigid, nitid, acuminate with an obtuse tip, and the stem is about 100 cm tall and 3 mm wide. In contrast, the corolla of *R. wirdackii* is 46 mm long, the corolla tube is white, slightly curved, 32 mm long, the leaf blades are membranous, dark green above, paler green below, long, slenderly acuminate, and the stem is 25–40 cm tall and 1–1.5 mm wide.

2. *Ruellia steyermarkii* Wasshausen, sp. nov. TYPE: Venezuela. Bolívar: Altiplanicie de Núria, cloud forest on summit of SE-facing escarpment, E of Cerro El Picacho, N of Las Nieves and Las Chicharras, 45 km N of Tumeremo, vicinity of Deborah, 600–650 m, 5–8 Feb. 1961, *Julian A. Steyermark* 89113 (holotype, US; isotypes, NY, VEN). Figure 2A–G.

Frutex volubilis caulis subteretibus, simplicibus vel ramosis, glabris. Folium lamina elliptica vel oblonga, breviter acuminata, basi angustata, subcoriacea vel membranacea, supra atroviridi, subitus pallide viridi costa et venis prominentibus, utrinque glabra; petiolo glabro. Inflorescentiae ex paniculis terminalibus, puberulis constantes; pedunculis puberulis; bracteolis oblanceolatis, glabris, cilolatis; calycis segmentis atrovirentibus, anguste ovatis,




Figure 1. A-D. *Ruellia menthoides* (Nees) Hiern (F. Guánchez 1954). —A. Habit. —B. Bract. —C. Bracteole and calyx segments. —D. Corolla. E-G. *Ruellia wurdackii* Wasshausen (Wurdack & Monachino 41082). —E. Habit. —F. Bracteoles and calyx segments. —G. Calyx segments and corolla.




Figure 2. A–G. *Ruellia steyermarkii* Wasshausen (J. A. Steyermark 88995). —A. Habit. —B. Bracteoles, calyx segments, and pistil. —C. Bracteoles, calyx segments, and ovary. —D. Corolla, stamens, and pistil. —E. Expanded corolla showing attachment of filaments. —F. Calyx segments and capsule. —G. Seed.

glabris, ciliatis; corolla pallide viridi, parce puberula, tubo leviter curvato, limbo obliquo, lobis vetustate revoluto-tortis, suborbicularibus; staminibus exsertis. Capsulae ovo-ideae, obtusae et apiculatae.

Vining subsprawling; stem erect, simple or branching, glabrous, brownish, subterete. Leaves petiolate, the petioles 0.5–1.5 cm long, canaliculate, glabrous; the blades elliptic to oblong, 7–13 cm long and 3.5–5 cm wide, short-acuminate at apex, narrowed at base, subcoriaceous or membranous, entire or undulate, both the upper and lower surface glabrous, dark green above, paler green below, the costa and lateral veins (4–6 pairs) conspicuous below, less so above, the cystoliths barely visible under a lens on the upper surface. Panicle terminal, 6–9 cm long and 6–7 cm wide, puberulous, the trichomes brownish, eglandular, the peduncles 2.5–3.5 cm long, puberulous; bracteoles oblanceolate, 12–14 mm long, 2–3 mm wide, glabrous and ciliolate; calyx grass green, winged on the angles, the segments narrowly ovate, 14–17 mm long, 7–8 mm wide, acuminate, glabrous and ciliolate, the cystoliths conspicuous under a lens; corolla pale green without, buff-green within on the lobes, sparingly puberulous with both glandular and eglandular trichomes, 30–33 mm long, the tube sometimes slightly curved, basally 4 mm wide, near mouth 15 mm wide, the limb oblique, 22–25 mm wide, the lobes revolute-twisting with age, suborbiculate, 9 mm long, 11 mm wide; stamens exserted, to 45 mm long; filaments greenish white, glabrous; anthers buff-brown, oblong, 8 mm long, 2 mm wide, glabrous, basal lobe 7 mm long; pollen spheroidal, 91 μm diam., the reticulum homobrochate, the membrane granular (Fig. 3C, D); ovary soft tomentose, the trichomes brownish; style greenish white, slender, exserted about 30 mm beyond mouth of the corolla. Capsule ovoid, 20 mm long, 10 mm wide, obtuse and apiculate at apex, puberulous, the trichomes appressed; seeds flat, 6 mm long and wide, minutely moss-like-puberulous when moistened; retinacula subcarinate, curved, 5 mm long, 0.5 mm wide, erose at tip.

Distribution. Steep moist forested slopes over boulders just below summit and on ridge on summit at elevations between 200 and 650 m.

Paratypes. VENEZUELA. BOLÍVAR: Río Toro (Río Grande), between Río La Reforma and Puerto Rico, N of El Palmar, 200–250 m, Julian A. Steyermark 88139 (VEN); Cerro El Picacho and vicinity, N of Las Chicharras, 45 km N of Tumeremo Altiplanicie de Nuria, 300–620 m, Julian A. Steyermark 88995 (NY, US, VEN); Camp "El Paraiso" and "La Yugua," 48 km NE of village Los Rosos, E end of 17 km of Upata, Carlos Blanco 447 (US).

Ruellia steyermarkii is perhaps most closely related to another Venezuelan Guayana species, *R. malaca* Leonard, which differs markedly by having linear-lanceolate calyx segments; pale yellow corollas 50–60 mm long; and oblong-ovate, 26–30-cm-long, 10.5–12-cm-wide leaf blades. In contrast, *R. steyermarkii* has narrowly ovate, winged on the angles calyx segments; pale green without, buff-green within corollas, 30–33 mm long; and elliptic to oblong, 7–13 cm long, and 3.5–5 cm wide leaf blades.

3. *Ruellia delascioi* Wasshausen, sp. nov. TYPE:
Venezuela. Territorio Federal Amazonas: Depto. Atabapo, Salto Yureba, Bajo Ventuari, 4°3'N, 66°1'W, 120–150 m, 24 Oct.–4 Nov. 1981, Francisco Delascio & Francisco Guánchez 10693 (holotype, US). Figure 4A–C.

Suffrutex caulis erectis, simplicibus vel ramosis, tomentosis. Folium lamina ovata, breviacuminata, basi obtusa, aliquanto firma, utrinque molliter hirtella; petiolo dense tomentoso vel minute puberulo. Inflorescentiae ex paniculis terminalibus, dense puberulis constantes; pedunculis dense et molliter tomentosis; bracteolis persistentibus, dense puberulis. Flores persistentes; calycis segmentis firmis, linear-lanceolatis, longo-acuminatis, dense puberulis, costa et venis obscuris; corolla minute glanduloso-puberula, viridi-flava, tubo curvato, limbo obliquo, lobis rotundatis; staminibus reflexis.

Shrub or subshrub; stem erect, simple or branching, grayish, subquadrangular, densely and softly tomentose. Leaves petiolate, the petioles 3.5–5 cm long, densely tomentose or minutely puberulous, the blades ovate, 18–20 cm long and 8.5–9.3 cm wide, short-acuminate at apex, obtuse at base and briefly decurrent on the petiole, firm, entire or undulate, the upper surface softly hirtellous, drying dark green, the trichomes erect, the lower surface paler green, softly hirtellous, the trichomes erect, grayish, the costa and lateral veins (6–8 pairs) rather prominent, especially below, the cystoliths inconspicuous under a lens. Panicle terminal, 6 cm long and wide, densely puberulent, the trichomes eglandular; peduncle 60 mm long, densely and softly tomentose; bracteoles persistent, oblong, 3.7 cm long, 8–9 mm wide, densely puberulent; flowers persistent; calyx segments firm, linear-lanceolate, about 3 cm long, 4 mm wide, long-acuminate, densely puberulent, the costa and veins obscure; corolla minutely glandular puberulent, greenish yellow, 35 mm long, the tube slightly curved, 3 mm wide at base, 10 mm wide near the mouth, the limb oblique, 20 mm wide, the lobes oblong, 7 mm wide, rotundate; stamens exserted and reflexed; filaments puberulous; anthers




Figure 3. Scanning electron (SEM) photomicrographs of *Ruellia* pollen. A-B. *R. wurdackii* (F. Guánchez 274). —A. Equatorial view, $\times 700$. —B. Portion of surface $\times 2,000$. C-D. *R. steyermarkii* (J. A. Steyermark 89113). —C. Equatorial view, $\times 800$. —D. Portion of surface $\times 3,000$.

oblong, 10 mm long, 2 mm wide, glabrous, basal thecae 6 mm long. Capsule wanting.

Distribution. Known only from the type locality.

Ruellia delascioi superficially resembles *R. malaca* Leonard from the Venezuelan Guayana. However, in *R. malaca* the pale yellow corolla is 50–60 mm long, 20 mm wide near the mouth, the

stamens are exserted but not reflexed, and the leaf blades are oblong-ovate, 26–30 cm long, 10.5–12 cm wide, and narrowed at base. In contrast, in *R. delascioi* the greenish yellow corolla is 35 mm long, 10 mm wide near the mouth, the stamens are both exserted and reflexed, and the leaf blades are ovate, 18–20 cm long, 8.5–9.3 cm wide, and obtuse at base.



Figure 4. A-C. *Ruellia delascioi* Wasshausen (Delascio & Guánchez 10693). —A. Habit. —B. Calyx segments. —C. Corolla and stamens. D-F. *Ruellia liesneri* Wasshausen (R. Liesner 25638). —D. Habit. —E. Leafy bracts and calyx segments. —F. Corolla and stamens.

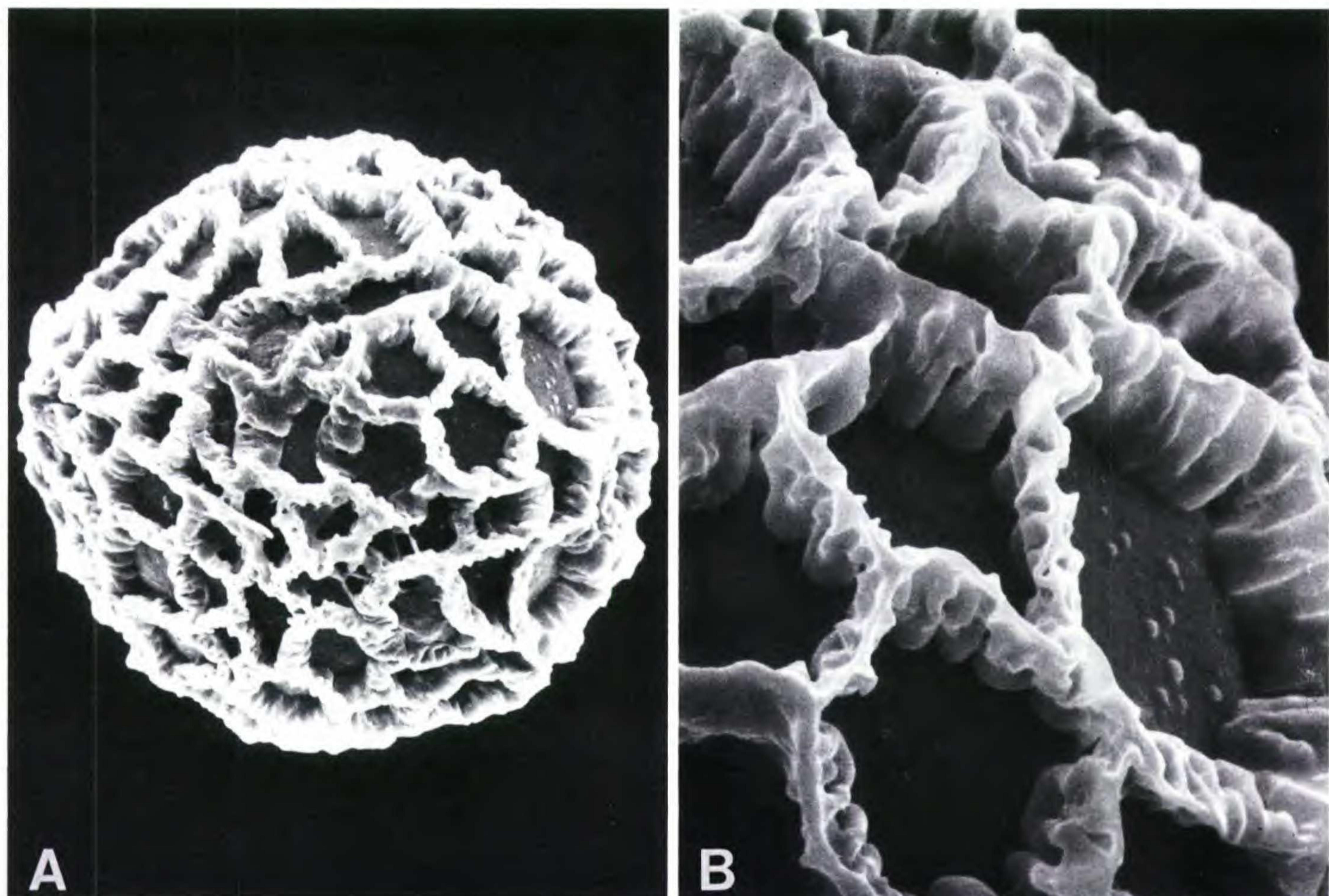


Figure 5. Scanning electron (SEM) photomicrographs of *Ruellia* pollen. A-B. *R. liesneri* (N. Cuello 400). —A. Equatorial view, $\times 1,000$. —B. Portion of surface $\times 3,000$.

4. ***Ruellia liesneri*** Wasshausen, sp. nov. TYPE: Venezuela. Territorio Federal Amazonas: Depto. Atabapo, E slope of Cerro Huachamacari, $3^{\circ}49'N$, $65^{\circ}42'W$, 600–700 m, 2 Nov. 1988, Ronald Liesner 25638 (holotype, US; isotype, MO). Figure 4D–F.

Herba volubilis caulis ascendentibus, subquadangularibus, parce pilosis et puberulis. Folium lamina oblonga vel anguste ovata, acuminata, basi rotundata, membranacea, atrovirenti, utrinque pilosa. Inflorescentia ex fasciculo terminali 2–3-floro bracteis foliaceis subtento constans; pedicellis strobilaceis, molliter et dense pilosis; bracteolis foliaceis, anguste lanceolatis, dense pilosis. Flos calycis segmentis lanceolatis, pilosis et glanduloso-punctatis; corolla coccinea, parce pilosa, glanduloso-punctata, hypocateriformi, tubo curvato et ventricoso, lobis oblongo-ovatis, emarginatis; staminibus exsertis. Capsulae clavatae, puberulae, glanduloso-punctatae, apice subobtusae.

Clambering herbs 0.3–2 m high; stems ascending, subquadangular, sparingly pilose and puberulous, the pilose trichomes erect, 1.5 mm long, puberulous trichomes (inconspicuous) appressed. Leaves petiolate, the petioles 5–12 mm long, pilose and puberulous, the pilose trichomes whitish, erect, 2 mm long, the blades oblong to narrowly ovate, 4.5–10 cm long and 2.5–4 cm wide, acuminate at apex,

rounded at base, entire, undulate or shallowly crenate, rich green, membranous, both surfaces pilose, the trichomes \pm erect, soft, prominent on the costa and lateral veins (7–9 pairs), the cystoliths inconspicuous under a lens. Fascicle terminal, 2–3-flowered, subtended by leafy bracts 2.5–3 cm long and 0.8–1.2 cm wide; pedicels conelike, 1–3 mm long, softly and densely pilose; bracteoles leaflike, narrowly lanceolate, 10 mm long, densely pilose; calyx 5–9 mm long, pilose and gland-dotted, the segments lanceolate, 4.5–8 mm long, 0.8–1 mm wide, pilose and gland-dotted; corolla scarlet or red, sparingly pilose, gland-dotted, 45–50 mm long, salverform, the tube slightly curved and ventricose, 2–3 mm broad at base, slightly narrowed above the ovary, thence gradually enlarged to about 7 mm at mouth, the limb 25–35 mm broad, the lobes oblong-ovate, 13 mm long and 10 mm wide near the tip, emarginate; stamens exserted 8–10 mm beyond mouth of the corolla tube; filaments sparingly and inconspicuously pilose; anthers oblong, 3 mm long, 1.5 mm wide, sparingly and inconspicuously pilose; pollen spheroidal, 65 μ m diam., the reticulum homobrochate, the membrane mostly smooth (Fig. 5A, B); the pistil exceeding the stamens, glabrous. Cap-

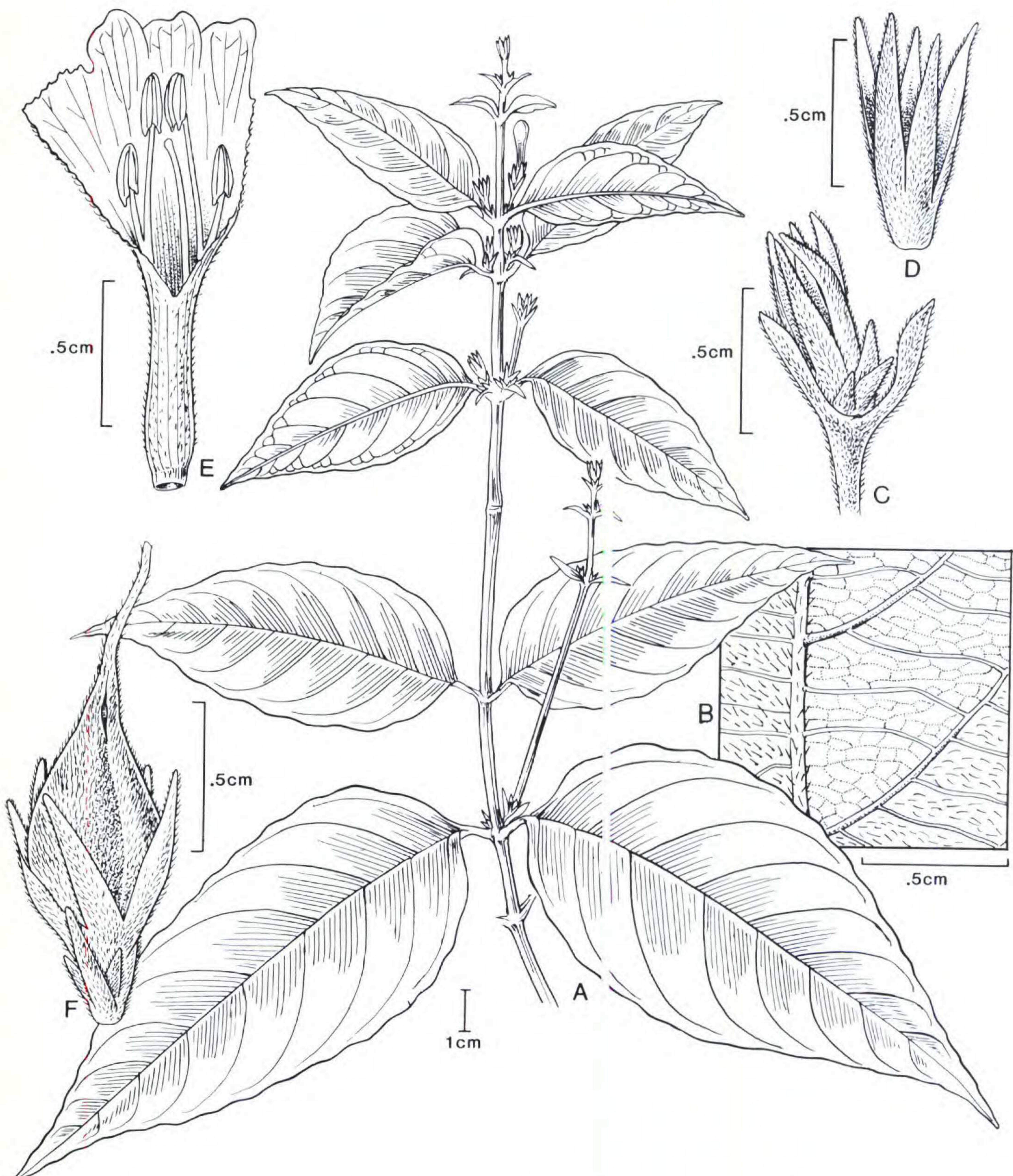


Figure 6. A-F. *Ruellia bolivarensis* Wasshausen (F. Cardona 49?). —A. Habit. —B. Enlargement of lower leaf surface. —C. Bracts, bracteoles, and calyx segments. —D. Calyx segments. —E. Expanded corolla, stamens, and pistil. —F. Bract, bracteoles, calyx segments, and capsule.

sule clavate, puberulous, gland-dotted, 15 mm long, 5 mm broad, rather bluntly pointed, narrowed to a slender, solid base about 3 mm long; seeds brown, appressed-puberulous, about 5 mm long and 4 mm wide.

Distribution. Open and forested areas around waterfall and on forested areas and igneous outcrops at elevations between 80 and 750 m.

Paratypes. VENEZUELA. TERRITORIO FEDERAL AMAZONAS: Depto. Atabapo, slope of Huachamacari, 3°39'N, 65°42'W, 750 m, Ronald L. Liesner 18378 (MO, US); Depto. Ayacucho, 35 km SE of Puerto Ayacucho, along Río Coromoto, at Tobogán de la Selva, 5°22'N, 67°33'W, 100 m, Steyermark, Davidse & Guánchez 122508 (MO, NY, US); forest 1 km below Tobogán de la Selva, 80 m, Steyermark, Holst & Manara 131550 (MO, US); Serranía de la Coromoto, sector "El Tobogán," 37 km S of Puerto Ayacucho, 5°24'N, 67°35'W, 80-200 m, Nidia Cuello 400 (US).

Ruellia liesneri is related to the widespread Venezuelan and Colombian species *R. humboldtiana* (Nees) Lindau. In *R. humboldtiana* the inflorescence is a thyrsoid panicle, with the branches each bearing from several to 20 or more flowers, these not subtended by any conspicuous, leafy bracts, the calyx 9–12 mm long, and with petioles 10–15 mm long, puberulous. In contrast, the inflorescence of *R. liesneri* is a 2–3-flowered fascicle, subtended by conspicuous, large, leafy bracts, the calyx 5–9 mm long, and the petioles are 5–12 mm long and both pilose and puberulous.

5. ***Ruellia bolivarensis*** Wasshausen, sp. nov.

TYPE: Venezuela. Bolívar: Sitio Parupa, río Paragua, Apr. 1943, *Felix Cardona* 492 (holotype, US). Figure 6A–F.

Herba vel suffrutex caulis quadrangularibus, sulcatis, parce pilosis. Folium lamina oblonga vel ovata, graciliter acuminata, basi rotundata, firma, praeter costam et venas pilosas glabra. Inflorescentiae ex spicis terminalibus laxis, flores in paribus oppositis gerentibus constantes, internodiis glabris vel parce pubescentibus; bracteis foliaceis quam foliis multo minoribus, oblongis; bracteolis anguste triangularibus. Flos calycis segmentis subulatis, pilosis; corolla anguste infundibuliformi, tubo curvato, lobis suborbicularibus, ad apicem irregulariter lobulatis; staminibus inclusis, antheris mucronulatis, glabris. Capsulae clavatae, puberulae, ad apicem acutae.

Plants herbaceous or suffrutescent; stems quadrangular, shallowly sulcate, the angles narrowly winged, the wings pilose, the trichomes barely 1 mm long, the cystoliths minute. Leaves petiolate, the petioles 5–15 mm long, minutely pilose, the blades oblong to ovate, 9–14 cm long, 3.3–6.4 cm wide, rather slenderly acuminate, distinctly rounded at base, firm, shallowly crenate, glabrous except the costa and lateral veins (5 or 6 pairs), these pilose, the trichomes about 0.5 mm long, spreading or subappressed, the cystoliths conspicuous under a lens on the upper surface. Flowers borne opposite in pairs on lax, nearly straight, rigid, ascending axillary and terminal spikes 2.5–8.5 cm long, the lowermost internodes 3 cm long, the others successively shorter, somewhat flattened near the nodes, glabrous or sparingly pubescent, the trichomes ascending to subappressed, about 0.2 mm long; bracts leaflike but much smaller, oblong, narrowed at both ends, 11 mm long and 2 mm wide; bracteoles narrowly triangular, 1 mm long, sparingly pilose; calyx

6–7 mm long, the segments subulate, 4–5 mm long, 0.75–1 mm wide at base, pilose, consisting of both glandular and eglandular trichomes, these erect or spreading; corolla 12–14 mm long, inconspicuously pilose, narrowly infundibular, the narrow portion of the tube slightly curved, 6–7 mm long, 1 mm broad at base, the limb about 4.5 mm wide, the lobes suborbicular, about 2 mm diam., irregularly lobulate at apex; stamens barely reaching the base of the corolla lobes; anther oblong, mucronulate, the upper pair 1.5 mm long, 0.5 mm wide, glabrous, the lower pair 1 mm long, 0.3 mm wide. Capsule slenderly clavate, about 13 mm long, puberulous, pointed at apex, the slender sterile basal portion about 6 mm long and 1 mm broad at base, enlarging to 1.25 mm at base of seed-bearing cavity, this flattened and about 2 mm broad; retinacula slender, curved, about 1.75 mm long, the slender tip ± erose.

Distribution. Known only from the type locality.

Ruellia bolivarensis superficially resembles *R. menthoides* (Nees) Hiern from Amazonian Venezuela and Brazil. However, in *R. menthoides* (Fig. 1A–D) the flowers are borne axillary, sessile, clustered, and verticillate; the corollas are 25 mm long, and the upper leaf blades are narrowed and acute at base. In contrast, in *R. bolivarensis* the flowers are borne opposite in pairs on lax, axillary and terminal spikes; the corollas are 12–14 mm long, and the upper leaf blades are distinctly rounded at base. This new taxon is unique from the other known species of neotropical *Ruellia*. It possesses mucronulate anther lobes, which thus far have not been reported for this genus in the literature, and a rather long, pointed capsule. Unfortunately, the single *Cardona* 492 collection is somewhat scanty; additional specimens should be collected for a proper diagnosis of these character states.

Acknowledgments. My special thanks to Alice Tangerini, who skillfully prepared the line drawings, and to Stephen F. Smith and the staff of the National Museum of Natural History SEM Laboratory for their high-quality pollen photomicrographs.

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